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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,681	04/14/2004	Mitsuharu Saikawa	5905.0111-01	4897

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EXAMINER

DEODHAR, OMKAR A

ART UNIT	PAPER NUMBER
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3714

MAIL DATE	DELIVERY MODE
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10/15/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/823,681	Applicant(s) SAIKAWA ET AL.	
	Examiner Omkar A. Deodhar	Art Unit 3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-17 and 20-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-17 and 20-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>4/14/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

NON-FINAL ACTION

Claim Rejections - 35 USC § 112

Claims 17 and 28 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 17 and 28 recite various versions of "a filter polygon which is overlapped under the gradation table except the match of the shadow model...0% designated." This is unclear. Examiner has interpreted this to mean that the bottom most polygon has an opacity value of 0%.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 9-11, 13-16, 20-22 and 24-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Shimizu et al. (US 6,720,976, hereafter: Shimizu).

Claim 9:

An image processing device comprising a character model and a polygon model for applying a transparency set to this character model, wherein said polygon model is applied to said character model and when applying said character model to this polygon

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model, the image processing of half transparency is performed for said character model based on said transparency data, (Abstract & Col. 2. Lines 8-28.)

Claim 10:

The image processing device according to Claim 9, wherein data for gradation processing, by which the transparency changes in order, is set for said polygon model, and when said character model is applied to said polygon model, the gradation processing of half transparency is performed for said character model, (gradation processing is interpreted as transparency changes taking place in a gradual manner; Shimizu discloses processing translucent polygons in a sequential manner, Abstract & Col. 2. Lines 8-28.)

Claims 11 & 22:

The character model is a projection image model corresponding to an object, (Col. 1. Lines 19-24.)

Claim 13:

Shimizu discloses transparency processing for a plurality of image models, (Col. 2. Lines 8-14.)

Claims 14-15:

Shimizu discloses that when a plurality of polygons overlap, rendering processing is executed sequentially from the polygon at the front to the last polygon in the set, (Col 2. Lines 48-67 & Col. 3. Lines 1-57.) This is interpreted as a disabling means because rendering processing is limited to front most polygons. Additionally, Shimizu discloses an opacity value, ranging from zero to one.

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Claim 16:

Tabular polygon/character models are disclosed, because the models are a systematic arrangement of data, (tabular is interpreted as a systematic arrangement of data.)

Claim 20:

Please refer to the rejections of claims 9 and 10.

Claim 21:

As discussed with respect to claim 10, gradation processing for the polygon and character models is disclosed and transparency processing takes place in a sequential manner.

Claim 22:

Please refer to the rejection of claim 11.

Claim 24:

Please refer to the rejection of claim 13.

Claims 25 and 26:

Please refer to the rejection of claims 14-15.

Claim 27:

Please refer to the rejection of claim 16.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 12, 17, 23 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yasui et al. (US 6,320,580, hereafter: Yasui).

Claims 12, 17, 23 and 28:

Shimizu teaches the invention substantially as claimed, but does not disclose image processing of overlapping shadow models.

Yasui discloses a method of performing a shadowing process in a rendering process, (Col. 3. Lines 13-18.) The shadow area is formed when lights are irradiated to a character by a plurality of light sources, (Col. 5. Lines 12-16.) Yasui also discloses shadow models with color information and various transparency values, (Figure 3). When combined with Shimizu's disclosure of overlapping polygons and sequential processing, the opacity of shadow models that are not in the front most position would be zero.

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include shadow processing for the purpose of providing a detailed display of a character's movement. This would allow for additional video feedback, thereby assisting a player in determining a character's location.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Omkar Deodhar whose telephone number is 571-272-1647. The examiner can normally be reached on Mon-Fri 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pezzuto can be reached on 571-272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Corbett Coburn/
Primary Examiner
AU 3714